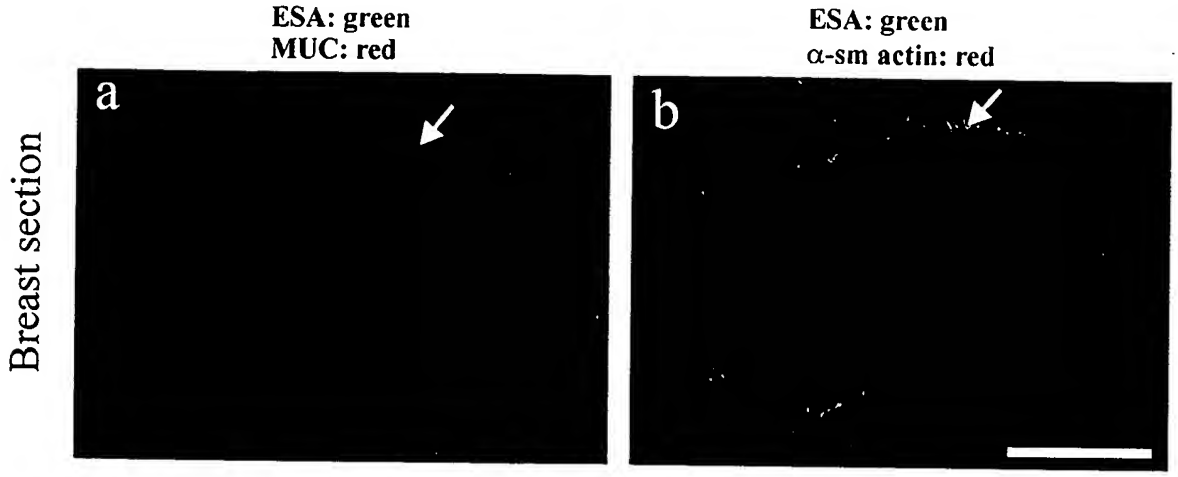
Identification of "suprabasal" luminal epithelial cells in the breast.

A. *Suprabasal cells belong to the luminal epithelial lineage.*



B. *A subset of cells within the luminal epithelial lineage is sialomucin-negative.*

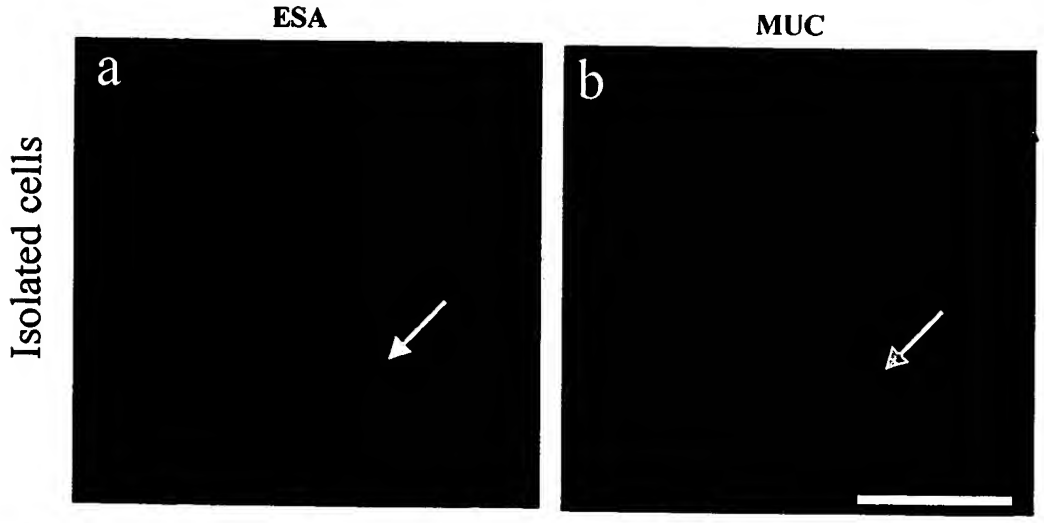
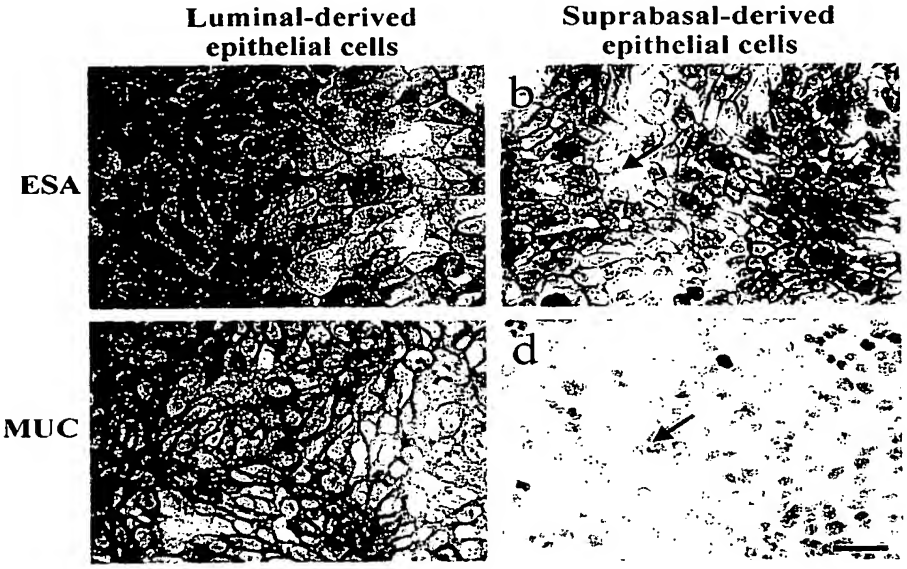


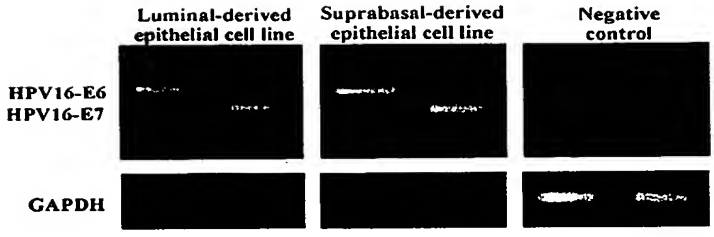
Fig. 1

Isolation, immortalization and characterization of luminal and suprabasal-derived epithelial cells.

A.



B.



C.

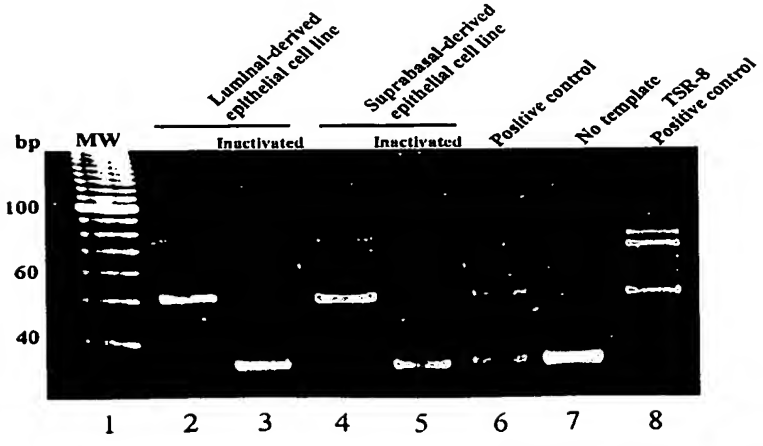


Fig. 2

D. *Both the luminal- and suprabasal-derived cell lines belong to the luminal epithelial lineage.*

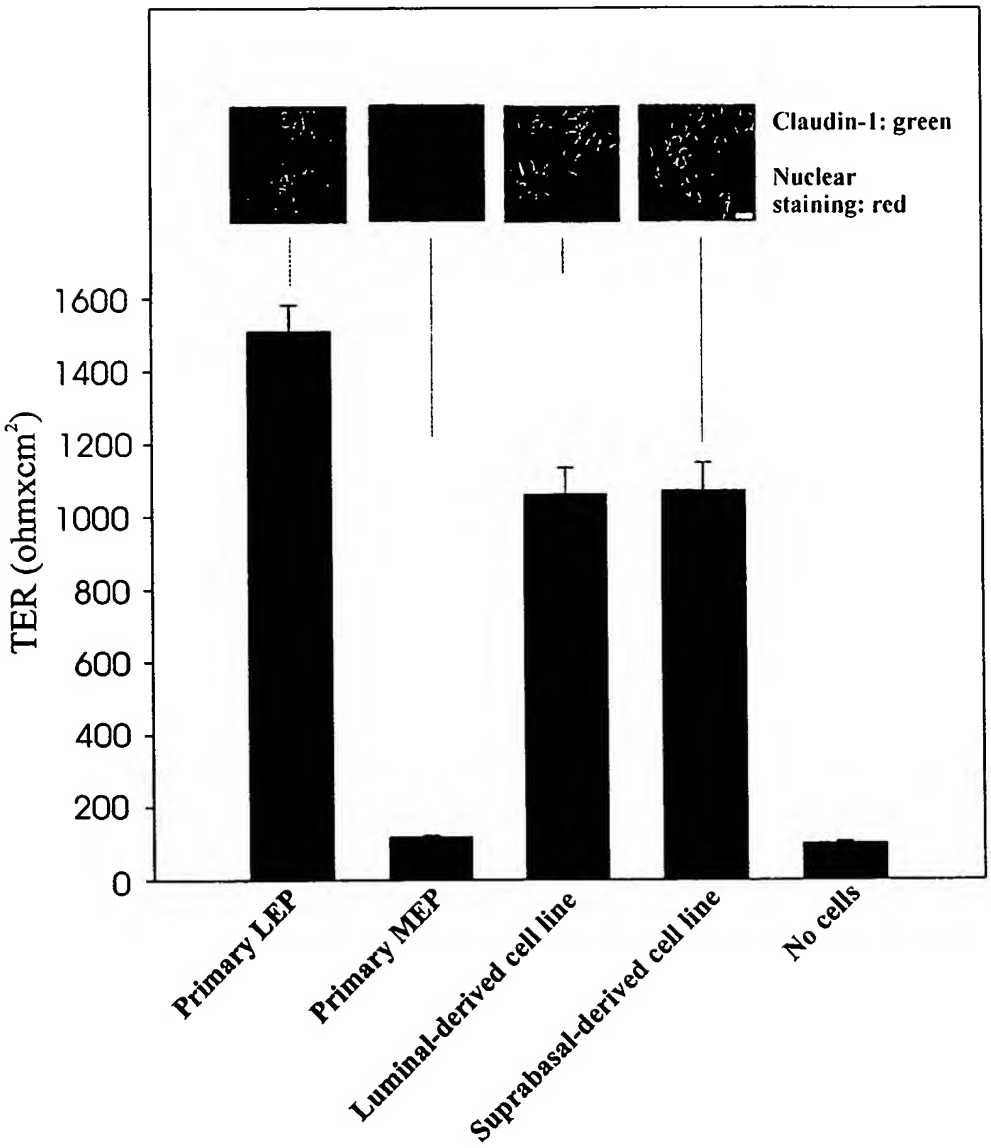


Fig. 2 (continued)

Evidence for multipotency in the suprabasal-derived epithelial cell line

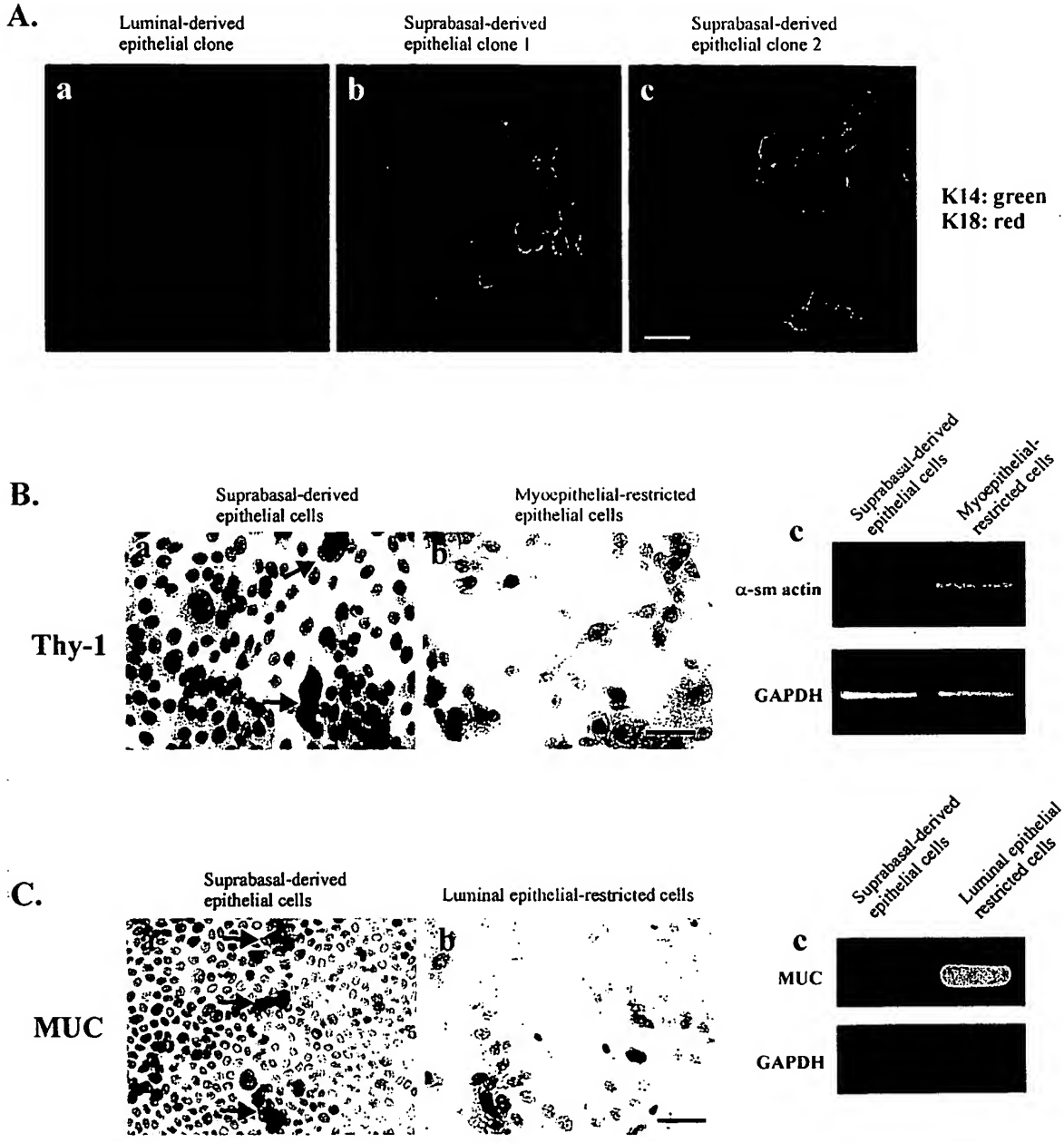
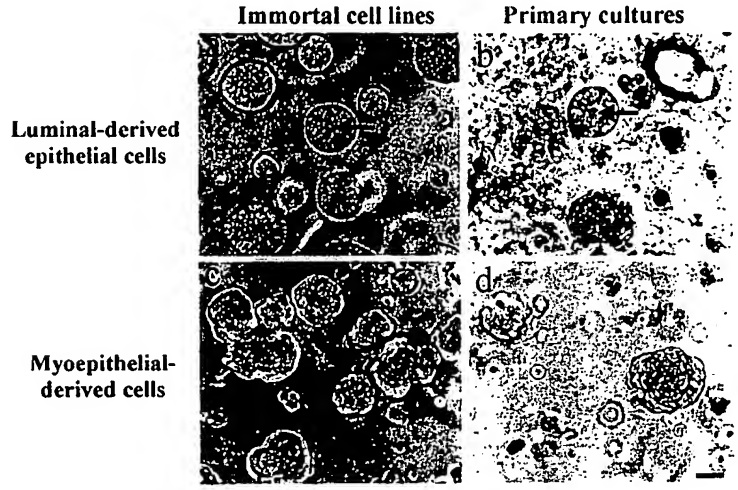


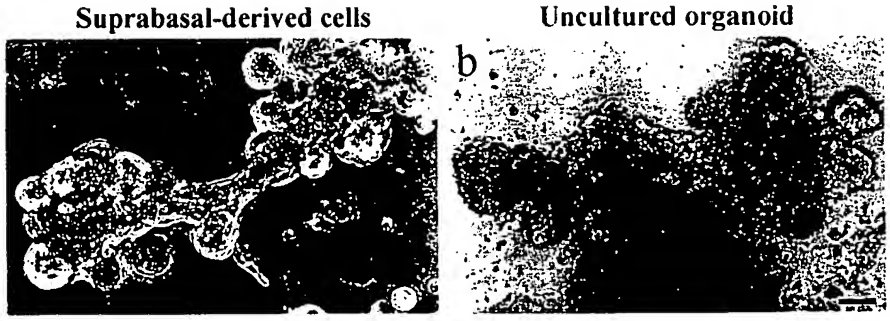
Fig. 3

Only suprabasal-derived epithelial cells give rise to terminal duct lobular units (TDLUs).

A



B



C

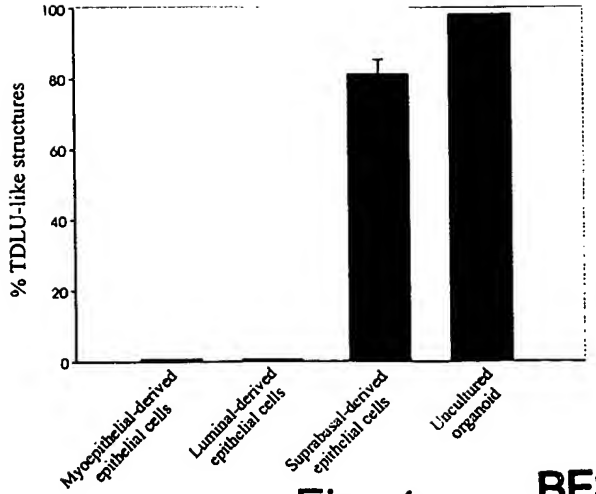


Fig. 4

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D. *Only suprabasal-derived epithelial colonies in a laminin-rich gel resemble TDLU in vivo.*

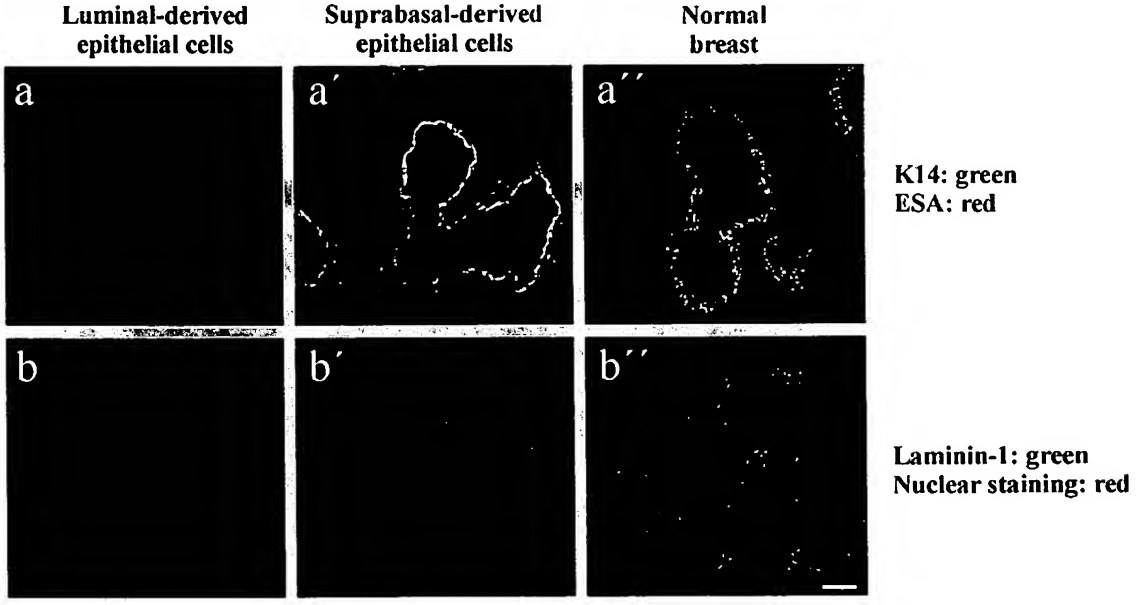
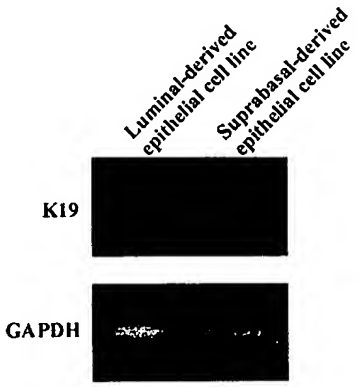


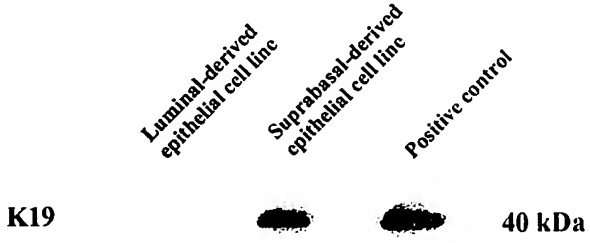
Fig.4 (continued)

The suprabasal-derived cells are keratin K19-positive similar to a subpopulation of cells in TDLU and neoplastic breast epithelial cells in vivo.

A. Luminal- and suprabasal-derived epithelial cells differ by expression of mRNA for keratin K19.



B. *Luminal and suprabasal-derived epithelial cells differ by expression of protein for keratin K19.*



C. *Keratin K19 staining in cultures of luminal- and suprabasal-derived epithelial cells.*

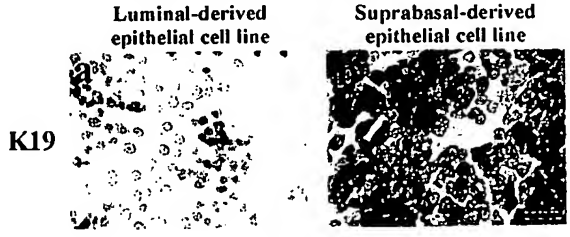


Fig. 5

Keratin K19 staining in sections of normal breast tissue (TDLU) and infiltrating ductal carcinoma (IDC).

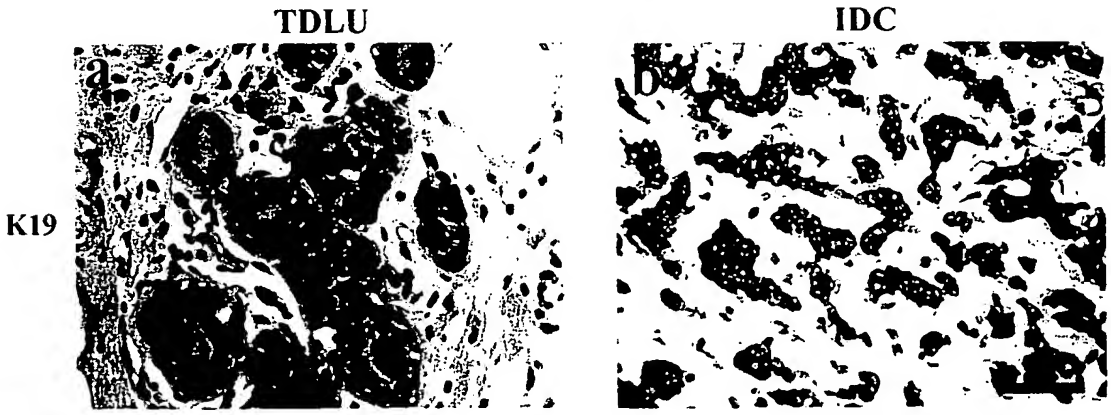
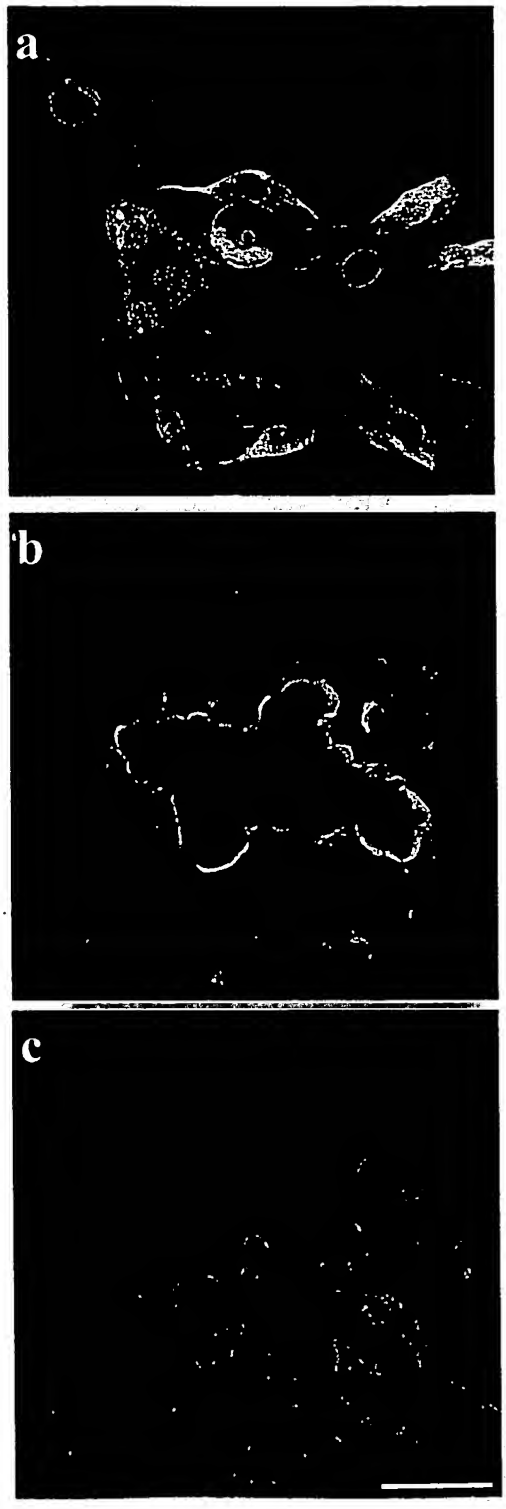


Fig.6

Clonal segregation of keratin K19-positive and K14-positive cells in two- and three-dimensional culture, and mouse implants of suprabasal-derived epithelial cells.



Clone in monolayer

K14: green
K19: red

Clone in laminin-rich gel

K14: green
K19: red

Nude mouse implant

K14: green
K19: red

Fig. 7